Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1-4.   (Canceled).

5.   (Previously Presented)   A method comprising:
receiving first data from a first communication line;
segregating the first data into packets;
selecting packets based on a respective type;
generating a statistic corresponding to the selected packets received during each of a plurality of successive first time periods, the first time periods having a first duration value;
separately storing the generated statistics for each of the plurality of successive first time periods;
associating a respective index with each selected packet;
converting each selected packet into a respective record including each packet's respective index;
storing the records;
receiving information defining a second time period longer than the first time period and encompassing at least one first time period; and
generating a further statistic corresponding to packets received during the second time period using at least one of the stored records and the stored statistics corresponding to packets received during the second time period.

6-8.   (Canceled).

9.   (Previously Presented)   A method comprising:
receiving first data from a first communication line;
segregating the first data into packets;
selecting packets based on a respective type;
generating a statistic corresponding to the selected packets received during each of a plurality of successive first time periods, the first time periods having a first duration value;
separately storing the generated statistics for each of the plurality of successive first time periods;

generating a further statistic by aggregating the plurality of stored statistics;

receiving a time signal from a global positioning satellite and generating a time when each selected packet was received based on an absolute time,

associating a respective index with each selected packet wherein the index corresponds to the generated time;

converting each selected packet into a respective record including each packet's respective index; and

storing the records.

10.   (Canceled).

11.   (Previously Presented)   A method comprising:

receiving first data from a first communication line;

segregating the first data into packets, the received packets originating from a second communication line, each received packet including an indication of a respective first time corresponding to transmission of said packet on the second communication line;

generating a statistic corresponding to packets received during each of a plurality of successive first time periods, the first time periods having a first duration value;

separately storing the generated statistics for each of the plurality of successive first time periods;

generating a further statistic by aggregating the plurality of stored statistics;

determining a respective second time when each packet is received from the first communication line; and

calculating a transmission delay corresponding to each packet by subtracting said packet's respective second time from said packet's respective first time wherein the transmission delay corresponding to each packet is calculated based on a time the packet is detected on the first communication line, a time the packet is detected on the second communication line, a rate of data transmission on the first communication line, and a length of the packet on the first communication line.

12-15. (Canceled).

16.   (Previously Presented)   A method comprising:

receiving first data from a first communication line;

segregating the first data into packets to provide received packets, each received packet originating from a second communication line and including an indication of a respective first time corresponding to transmission of said packet on the second communication line;

generating a statistic corresponding to packets received during each of a plurality of successive first time periods, the first time periods having a first duration value;

separately storing the generated statistics for each of the plurality of successive first time periods;

generating a further statistic by aggregating the plurality of stored statistics;

receiving a time signal from a global positioning satellite for determining a respective second time when each packet is received from the first communication line; and

calculating a transmission delay corresponding to each packet by subtracting said packet's respective second time from said packet's respective first time.

17.   (Canceled).

18.   (Currently Amended)   A method comprising~~according to claim 17~~:
        receiving first data from a first communication line;
        segregating the first data into packets;
        selecting packets based on a respective type;
        associating a respective index with each selected packet;
        generating a statistic corresponding to the selected packets received during each of a plurality of successive first time periods, the first time periods having a first duration value, the statistic including at least one quality of service value indicating ~~wherein the at least one quality of service value indicates~~ at least one of a round trip delay and a retransmit rate; ~~corresponding to the packets of the predetermined packet type received during the respective successive time period~~
        separately storing the generated statistics for each of the plurality of successive first time periods;
        generating a further statistic by aggregating the plurality of stored statistics;
        converting each selected packet into a respective record including each packet's respective index; and
        storing the records.

19-24. (Canceled).

25.   (Canceled).

26.   (Canceled).

27.   (Canceled).

28.   (Currently Amended) A method ~~according to claim 25 further~~ comprising ~~the step~~
~~of~~:

          receiving first data from a first communication line;
          segregating the first data into packets;
          generating a statistic corresponding to packets received during each of a
plurality of successive first time periods, the first time periods having a first duration value;
          separately storing the generated statistics for each of the plurality of successive
first time periods;
          generating a further statistic by aggregating the plurality of stored statistics;
          counting packets of each a plurality of packet types received during each of the
successive first time periods;
          displaying the plurality of packet types and their corresponding counts
accumulated over a second time period greater than the first time period in a first portion of a
display area of a display device;
          generating a graphical display of the statistics corresponding to the plurality of
packet types in a plot ranging over the second time period in a second portion of the display
area, wherein the plot includes a plurality of discrete selectable time periods;
          receiving a user selection of a range of the plurality of discrete selectable time
periods; and
          updating the graphical display to display statistics corresponding to the selected
time periods.

29.   (Canceled).

30.   (Previously Presented) A method comprising:
          receiving first data from a first communication line;
          segregating the first data into packets;

selecting packets based on a respective type;

generating a statistic corresponding to the selected packets received during each of a plurality of successive first time periods, the first time periods having a first duration value;

separately storing the generated statistics for each of the plurality of successive first time periods;

generating a further statistic by aggregating the plurality of stored statistics;

associating a respective index with each selected packet;

converting each selected packet into a respective record including each packet's respective index;

storing the records;

identifying packets belonging to a data stream;

storing stream identification information as one of a separate record and a separate field in the records corresponding to the identified packets; and

recreating the data stream using the stored records and the stored stream identification information.

31.   (Previously Presented) A method comprising:

receiving first data from a first communication line;

segregating the first data into packets;

selecting packets based on a respective type;

generating a statistic corresponding to the selected packets received during each of a plurality of successive first time periods, the first time periods having a first duration value;

separately storing the generated statistics for each of the plurality of successive first time periods;

generating a further statistic by aggregating the plurality of stored statistics;

associating a respective index with each packet, the respective index including a respective time value;

converting each packet into a respective record including each packet's respective index, each record including a uniquely identifiable portion of the respective selected packet;

storing the records;

receiving second data from a second communication line in a network including the first communication line;

segregating the second data into packets;

selecting packets received from the second communication line based on a respective type of each packet;

determining a respective time value corresponding to a time when each of the selected packets received from the second communication line was received;

associating a respective index with each of the selected packets received from the second communication line, the respective index including the respective time value;

converting each of selected packets received from the second communication line into a respective record that includes a uniquely identifiable portion of the selected packet from the second communication line and includes said packet's respective index;

storing the records corresponding to the selected packets received from the second communication line;

comparing the uniquely identifiable portions of packets received from the first communication line to the uniquely identifiable portions of packets received from the second communication line to determine which selected packets received from the first communication line correspond to packets received from the second communication line to generate matched pairs of packets; and

generating a transmission delay corresponding to each matched pair of packets using their respective indexes.

32.   (Original) The method according to claim 31 wherein the transmission delay for a particular matched packet is calculated based on a time of receipt of the matched packet on the first transmission line, a time of receipt of the matched packet on the second transmission line, a rate of data transmission on the first transmission line, and a length of the matched packet on the first transmission line.

33.   (Original) A method according to claim 32 wherein the first communication line transmits data using a first protocol and the second communication line transmits data using a second protocol different from the first protocol.

34.   (Original) A method according to claim 31 wherein the transmission delay is generated at a level of accuracy less than 10 microseconds.

35-78. (Canceled).

79.   (Previously Presented)   A method comprising

receiving first data from a first communication line;

segregating the first data into packets;

selecting packets corresponding to communication sessions;

generating a statistic corresponding to the selected packets received during each of a plurality of successive first time periods, the first time periods having a first duration value, the statistic including a number of packets corresponding to unsuccessful communication sessions received during each successive first time period;

separately storing the generated statistics for each of the plurality of successive first time periods;

generating a further statistic by aggregating the plurality of stored statistics;

associating a respective index with each selected packet;

converting each selected packet into a respective record including each packet's respective index; and

storing the records.

80.   (Previously Presented)   A method for processing data according to claim 79 wherein the respective type is packets corresponding to TCP sessions and the method comprises selecting packets corresponding to TCP sessions and step (c) comprises generating a ratio of a quantity of unsuccessful TCP sessions to a quantity of total TCP sessions during a time period.

81.   (Previously Presented)   A method according to claim 80 wherein the unsuccessful TCP sessions are identified to be those TCP sessions that were closed by other than a corresponding server.

82.   (Previously Presented) A method according to claim 11 wherein the transmission delay corresponding to each packet is calculated using the equation

transmission delay = (ts1-ts2)-(link_speed /packet_length)

where ts1 and ts2 are the first and second times, respectively, the link_speed is a data rate on the first communication line, and the packet_length is the length of each respective packet on the first communication line.

83.   (Canceled).

84.   (Previously Presented)   A method according to claim 31 further comprising the steps of:

generating flow statistics based on the flow of data between the first and second communication lines; and

routing further data between the first and second communication lines based on the generated flow statistics.

85.   (Previously Presented) A method comprising:

receiving first data from a first communication line with a host computer having a network interface card coupled to the first communication line;

segregating the first data into packets;

generating a statistic corresponding to packets received during each of a plurality of successive first time periods, the first time periods having a first duration value;

separately storing the generated statistics for each of the plurality of successive first time periods;

generating a further statistic by aggregating the plurality of stored statistics;

requesting an interface clock value from the network interface card;

generating an adjusted interface clock value by subtracting a predetermined service time from the interface clock value;

providing the adjusted interface clock value to the host computer;

receiving a host clock value; and

correlating the adjusted interface clock value with the host clock value.

86-90. (Canceled).

91.   (Previously Presented) A system comprising:

a network interface for receiving first data from a first communication line;

a packetizer for extracting a plurality of packets from the first data;

a memory;

a processor for generating a first statistic corresponding to packets received during each of a plurality of successive first time periods, the first time periods having a first duration value, storing the generated statistics for each of the plurality of successive

first time periods in the memory, and generating a second statistic by aggregating the plurality of stored statistics;

a time source synchronized to an absolute time source; and

a processor for determining a time when each respective one of the plurality of packets was received from the first communication line.

92.   (Previously Presented) A system according to claim 91 wherein the time source is a receiver for receiving a time signal from a global positioning satellite.

93.   (Canceled).